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NEW LARVAL FOOD PLANTS FOR SOME AUSTRALIAN BUPRESTIDAE AND CERAMBYCIDAE (COLEOPTERA)

By Geoff Williams

c/- Post Office, Lansdowne via Taree, N.S.W. 2430

Abstract

Previously unrecorded larval food plant data are presented for forty three cerambycid and eight buprestid species.

Introduction

Recent reviews of known larval food plants for Australian Cerambycidae (Duffy 1963) and Buprestidae (Hawkeswood and Peterson 1982) illustrate the paucity of larva/host relationship data presently available for our extensive cerambycid and buprestid beetle faunas.

The records listed below constitute new food-plant records resulting from breeding undertaken by the author. Unless otherwise stated in the list branches were collected dead, either attached to trees or broken off but still suspended in foliage. The condition of the wood stated briefly with each record relates to the wood condition at the time of collection only; varying degrees of drying out, decay or fungal activity occurred during storage of the wood samples. Diameters of branches from which the food-plant records are listed did not exceed 7 cm and most frequently were within the range of 2-3 cm.

Larval food plant records

Family Buprestidae

Agrilus deauratus Macleay. Harrington, N.S.W., emerged 19.xii.1982, from dead, dry branch of ?*Drypetes australasica* (J. Muell.) Pax et Hoffm. (Euphorbiaceae) ex littoral rainforest.

Halliday's Point, SE of Taree, N.S.W., emerged 17.i.1983, from dead, dry branch of *Acacia* sp. (Mimosaceae) ex littoral rainforest.

Redhead, SE of Taree, N.S.W., emerged 20.iii.1983, from dead, dry branch of *Acacia ?longifolia* (Andrews) Willd. (Mimosaceae) ex eucalypt woodland/littoral rainforest interface.

3 km N of Lansdowne, N.S.W., emerged 22.xi.1982-4.ii.1983, from dead, dry branchlet of *Eucalyptus paniculata* Sm. (Myrtaceae) ex wet sclerophyll forest.

Chrysobothris simplicifrons Kerremans. S base of Cape Hawke via Forster, N.S.W. Adults were seen ovipositing, in February 1982, on a fallen dying branch of *Rapanea variabilis* (R. Br.) Mez (Myrsinaceae) in littoral rainforest. Larval activity was subcortical and adults emerged 7.xii.1982 to 1-2.i.1983.

Melobasis hypocrita Erichson. Moppy Lookout Rest Area, Barrington Tops State Forest via Gloucester, N.S.W., emerged 18.i.-5.ii.1984, from dying branch of *Nothofagus moorei* (F. Muell.) Krasser (Fagaceae) ex cool temperate rainforest. Dingo Tops Forest Park, Dingo State Forest, NW of Wingham, N.S.W., emerged 7.ii.-3.iii.1984, from dying, fallen branch of *Doryphora sassafras* Endl. (Monimiaceae) ex rainforest.

Nascioides ?multesima (Olliff). Dingo Tops Forest Park, Dingo State Forest, N W of Wingham, N.S.W., emerged 18-28.iv.1983, from a dying fallen branch of *Doryphora sassafras* Endl. (Monimiaceae), ex rainforest.

Nascioides tillyardi (Carter). Moppy Lookout Rest Area, Barrington Tops State Forest via Gloucester, N.S.W., emerged ix.1983-31.x.1983, from dying branch of *Nothofagus moorei* (F. Muell.) Krasser (Fagaceae) ex cool temperate rainforest.

Pseudanilara cupripes (Macleay). 3 km N of Lansdowne, N.S.W., emerged 30.xi.1981, from dead, dry trunk wood of *Rhodomyrtus psidioides* (G. Don) Benth. (Myrtaceae) ex wet sclerophyll forest.

3 km N of Lansdowne, N.S.W., emerged 3-20.xii.1982, from dead dry branches of *Syzygium floribundum* F. Muell. (Myrtaceae), ex wet sclerophyll forest.

Stigmodera praetermissa Carter. 3 km N of Lansdowne, N.S.W., emerged 8-10.xii.1982, from a dead, dry and fallen branch of *Eucalyptus microcorys* F. Muell. (Myrtaceae), ex wet sclerophyll forest. Larva tunnelled along old heartwood where it also pupated.

Torresita cuprifera Kirby. 3 km N of Lansdowne, N.S.W., emerged 5.xi.1982-1.xii.1982, from dead, dry trunk wood of *Rhodomyrtus psidioides*, ex wet sclerophyll forest. Two colour forms emerged from the same trunk wood section; *T. cuprifera* var. *chrysochloris* L. & G. and *T. cuprifera* var. *dilatata* Redt. (1 specimen only).

Family Cerambycidae

Amphiroe decora Newman. 3 km N of Lansdowne, N.S.W., emerged 5.xi.1982-2.xii.1982, from a dead dry branch of *Acacia melanoxylon* R.Br. (Mimosaceae), ex gully restricted rainforest and wet sclerophyll forest, and wet/dry sclerophyll forest interface. Larvae tunnel mainly in the subcortex.

Anastetha raripila Pascoe. Yarratt State Forest, N E of Wingham, N.S.W., emerged 17.xi.1982, from a dead, dry *Acacia* branch, ex depauperate rainforest.

- Ancita marginicollis* (Boisduval). Redhead, approximately 20 km S E of Taree, N.S.W., emerged 21.xi.1982-19.xii.1982, from a dead, dry branch of *Acacia longifolia* (Andrews) Willd. (Mimosaceae), ex littoral rainforest/*Eucalyptus* woodland margin.
Laurieton, N.S.W., emerged 15-21.i.1983, from a dead, dry *A. longifolia* branch, ex *Eucalyptus* woodland.
3 km N of Lansdowne, N.S.W., emerged from dead, dry wood of *Acacia melanoxylon*, ex wet sclerophyll forest.
3 km N of Lansdowne, N.S.W., emerged 28.xii.1982, from a dead branch of *Eucalyptus paniculata* Sm. (Myrtaceae), ex wet/dry sclerophyll forest interface. In *Acacia* the larvae are mainly active subcortically.
- Athemistus pubescens* Pascoe. 3 km N of Lansdowne, N.S.W., emerged 24.x.1982, from a damp, rotting branch of *Eucalyptus grandis* W.Hill ex Maiden (Myrtaceae) collected on ground (fungal hyphae prominent in wood), ex rainforest/wet sclerophyll forest interface.
- Bethelium signiferum* (Newman). 3 km N of Lansdowne, N.S.W., emerged 15.ix.1982-14.xi.1982, from dead, dry branches of *Acacia melanoxylon*, ex wet/dry sclerophyll forest interface.
3 km N of Lansdowne, N.S.W., emerged 6.x.1982-18.xi.1982, from dead, dry *Eucalyptus paniculata* branches, ex wet/dry sclerophyll forest interface. Larval activity subcortical.
- Ceresium australe* Carter. 3 km N of Lansdowne, N.S.W., emerged i.1984, from dead, dry cane of *Lantana camara* L. (Verbenaceae) ex rainforest.
- Cyclocranium swierstrae* Poll. 3 km N of Lansdowne, N.S.W., cut from heartwood of a dead, dry and fallen branch of *Eucalyptus grandis*, 30.vi.1982, ex wet sclerophyll forest.
- Cyrtillus albofasciatus* Aurivillius. Harrington, N.S.W., emerged 3.ix.1982, from a dead, dry branchlet of *Maclura cochinchinensis* (Lour.) Corner (Moraceae), ex littoral rainforest.
- Demonisis ?filum* Pascoe. 3 km N of Lansdowne, N.S.W., emerged 26.ix.1982-24.x.1982, from dead, dry branch of *Syzygium floribundum* F.Muell. (Myrtaceae), ex wet sclerophyll forest.
- Didymocentrus foveatus* Aurivillius. 3 km N of Lansdowne, N.S.W., emerged 15.iii.1983-iv.1983, from a dead, dry branch of *Croton* sp., (Euphorbiaceae), ex wet sclerophyll forest; larvae active subcortically.
- Disterna bifasciata* Pascoe. 3 km N of Lansdowne, N.S.W., emerged 13.xii.1983, from dying branch of *Ficus macrophylla* Desf. (Moraceae) ex rainforest/wet sclerophyll association.
- Distichocera superba* Poll. 3 km N of Lansdowne, N.S.W., cut from dying branch of *Syzygium floribundum* F. Muell. (Myrtaceae), 10.xii.1983, ex rainforest/wet sclerophyll association.
- Ectinope spinicollis* Pascoe. Laurieton, N.S.W., emerged 20.xii.1982-21.i.1983, from a dead, dry branch of *Acacia longifolia*, ex *Eucalyptus* woodland.
Yarratt State Forest, N E of Wingham, N.S.W., emerged 4.i.1983-18.ii.1983, from a dead, dry *Acacia decurrens* (Wendl.) Willd. (Mimosaceae) branch, ex dry sclerophyll forest.

- Homaemota tricolor* Lea. Moppy Lookout Rest Area, Barrington Tops State Forest via Gloucester, N.S.W., emerged 20.i.1983, from dying fallen branches of *Nothofagus moorei* (F.Muell.) Krasser (Fagaceae), ex cool temperate rainforest.
- Illaena inconspicua* (Pascoe). Halliday's Point, N.S.W., emerged 14.xi.1982-4.i.1983, from dry, dead branches of *Acacia* sp., ex littoral rainforest.
3 km N of Lansdowne, N.S.W., emerged 19.ix.1982-28.x.1982, from dead, dry branches of *Acacia melanoxylon*, ex wet sclerophyll forest.
3 km N of Lansdowne, N.S.W., emerged 29.x.1982-3.xii.1982, from dead, dry branches of *Eucalyptus paniculata*, ex wet/dry sclerophyll forest interface.
- Mesolita antennalis* Carter. Moppy Lookout Rest Area, Barrington Tops State Forest via Gloucester, N.S.W., emerged 11.x.1983, from dying branch of *Nothofagus moorei* ex cool temperate rainforest.
- Notoceresium setistriatus* McKeown. 5 km W of Comboyne, N.S.W., emerged 22.-30.x.1983, from dead, dry canes of *Cissus antarctica* Vent. (Vitidaceae) ex subtropical rainforest margin.
- Pentacosmia scoparia* Newman. Harrington, N.S.W., emerged 1-4.ii.1983, from a dead, dry branch of ? *Drypetes australasica* (J.Muell.) Pax et Hoffm. (Euphorbiaceae), ex littoral rainforest.
Halliday's Point, N.S.W., emerged 19.ix.1982-8.xi.1982, from a dead, dry *Acacia* branch, ex littoral rainforest.
3 km N of Lansdowne, N.S.W., emerged 3.ix.1982, from a dead, dry branch of *Glochidion ferdinandii* (J.Muell.) F.M. Bail (Euphorbiaceae), ex regenerating wet sclerophyll forest.
Moppy Lookout Rest Area, Barrington Tops State Forest via Gloucester, N.S.W., emerged ix.-xii.1983, from dying branch of *Nothofagus moorei* ex cool temperate rainforest.
Dingo Tops Forest Park, Dingo State Forest, NW of Wingham, N.S.W., emerged 22.x.1983-xii.1983, from fallen, dying branches of *Doryphora sassafras* ex rainforest.
Manning Point, E of Taree, N.S.W., emerged 13-18.xii.1983, from dead, dry branch of *Alectryon coriaceus* (Benth.) Radlk. (Sapindaceae) ex littoral rainforest.
- Phaeapate ?albula* Pascoe. 3 km N of Lansdowne, N.S.W., emerged 28.x.1982, from a dead, dry *Acacia melanoxylon* branch, ex gully rainforest.
- Phaeapate denticollis* Pascoe. approximately 5 km W of Comboyne, N.S.W., 12.xi.1982, cut from dead, dry *Solanum mauritianum* Scop. (Solanaceae) stem, ex subtropical rainforest margin.
5 km W of Comboyne, N.S.W., emerged 26.x.1983-30.xi.1983, from dead, dry canes of *Cissus antarctica* ex subtropical rainforest margin.
3 km N of Lansdowne, N.S.W., emerged 5-13.xii.1983, from dead branchlet of *Ficus obliqua* Forst. f. (Moraceae) ex wet sclerophyll forest-pasture margin.
5 km NE of Harrington, N.S.W., emerged 2-8.i.1984, from dead, dry branch of *Alphitonia excelsa* (Fenzl) Benth. (Rhamnaceae) ex littoral rainforest.
3 km N of Lansdowne, N.S.W., emerged 25.i.1983-8.iv.1983, from dead, dry branchlets and twigs of *Amylotheca* sp. (Loranthaceae), collected on ground in wet sclerophyll forest.
- Phyltaenodes pustulatus* (Hope). approximately 5 km W of Comboyne, N.S.W., emerged 6.ii.1982, from dead, dry branches of *Lantana camara* L. (*sens. lat.*) (Verbenaceae). ex subtropical rainforest margin. Larvae tunnelled through heartwood.

- Piesarthrius marginellus* Hope. Halliday's Point, SE of Taree, N.S.W., emerged 27.ii.1984, from dying branchlet of *Acacia ?maidenii* F. Muell. (Mimosaceae) ex littoral rainforest margin. Larva tunnelled through heartwood killing branch.
- Platymopsis nigrovirens* (Donovan). approximately 6 km S E of Laurieton, N.S.W., emerged 10.xii.1982, from live lateral branch of *Alphitonia excelsa* (Fenzl.) Benth. (Rhamnaceae), ex littoral rainforest, larva tunnelled downwards through heartwood progressively killing branch.
Harrington, N.S.W., emerged 11.xi.1982, from a dead, dry branch of ? *Drypetes australasica*, ex littoral rainforest, larva tunnelled through old heartwood.
- Rhagiomorpha exilis* Pascoe. 3 km N of Lansdowne, N.S.W. emerged 8.ix.1981, from a dead, fallen dry branchlet of *Eucalyptus ? microcorys* F.Muell. (Myrtaceae), ex wet/dry sclerophyll forest interface. Larvae tunnelled through heartwood.
- Rhinophthalmus nasutus* (Shuckard). 3 km N of Lansdowne, N.S.W., emerged 12-14.xi.1982, from a dry, dead, branch of *Acacia melanoxylon*, ex wet/dry sclerophyll forest interface.
Halliday's Point, N.S.W., emerged 2.xii.1982, from a dead, dry *Acacia* branch, ex littoral rainforest.
- Ropica exocentroides* Pascoe. 3 km N of Lansdowne, N.S.W., emerged 3.xi.1982-3.xii.1982, from dead, dry branchlets of *Eucalyptus paniculata*, ex wet/dry sclerophyll forest interface.
- Sisyrium ibidionoides* (Pascoe). 3 km N of Lansdowne, N.S.W., emerged 23-24.xi.1982, from dead, dry branchlets of *Eucalyptus acmeniooides* (Myrtaceae), ex wet/dry sclerophyll forest interface. Larvae tunnelled through old heartwood.
- Stenellipsis cruciata* Breuning. 3 km N of Lansdowne, N.S.W., emerged 26-31.x.1983, from dead branchlet of *Ficus obliqua* ex wet sclerophyll forest/pasture margin.
- Strongylurus cretifera* (Hope). Dingo Tops Forest Park, Dingo State Forest, N W of Wingham, N.S.W., emerged 25.xii.1982, from a dying, fallen branch of *Doryphora sassafras* Endl. (Monimiaceae), ex rainforest. Larva tunnelled through heartwood.
- Sybra acuta* (Pascoe). Halliday's Point, N.S.W., emerged 14-17.xi.1982, from a dead, dry *Acacia* branch, ex littoral rainforest.
- Sybra centurio* Pascoe. 3 km N of Lansdowne, N.S.W., emerged 12-14.x.1981, from dead, dry fronds of *Lepidozamia peroffskyana* Regel (Zamiaceae), ex wet forest complex. Larvae occupy basal half of rachis and distal half of frond petioles only.
- Syllitosimilis aberrans* McKeown. Yarratt State Forest, N E of Wingham, N.S.W., emerged 4-10.xi.1982, from dead, dry branches of *Acacia decurrens*, ex dry sclerophyll forest.
3 km N of Lansdowne, N.S.W., emerged 22-29.x.1983, from dead, dry branch of *Acacia irrorata* Sieb. ex Spreng. (Mimosaceae) ex wet sclerophyll forest margin.
- Temnosternus planiusculus* White. 3 km N of Lansdowne, N.S.W., emerged 7.ix.1981-21.x.1982, from dead, dry fronds of *Lepidozamia peroffskyana*, ex wet forest complex. Larvae present in basal half of frond petioles only (for possible frond partitioning see *Sybra centurio* above).
- Tessaromma nanum* Blackburn. 5 km W of Comboyne, N.S.W., emerged 22.x.1983-29.xii.1983, from dead, dry canes of *Cissus antarctica* on subtropical rainforest margin.

- Tessaromma sordida* McKeown. South slope of Cape Hawke via Forster, N.S.W., emerged approximately 7.xii.1982, from a dying, fallen branch of *Rapanea variabilis* (R.Br.) Mez (Myrsinaceae), ex littoral rainforest.
- Tessaromma undatum* Newman. Moppy Lookout Rest Area, Barrington Tops State Forest via Gloucester, N.S.W., emerged 1-6.vi.1983 and ix.1983, from fallen, dying branch of *Nothofagus moorei* ex cool temperate rainforest.
- Tryhada barbicornis* Pascoe. 3 km N of Lansdowne, N.S.W., emerged 27.xi.1983-13.xii.1983, from dying branch of *Ficus macrophylla* ex rainforest/wet sclerophyll forest association.
- Tragocerus spencei* Hope. Approx. 24 km SW of Ebor, N.S.W., cut from dying and dead stems of *Banksia* sp. (Proteaceae), 12.xii.1983, ex dry sclerophyll forest margin. Adults had girdled the stems of young *Banksia* plants growing on roadsides. The larvae bored downwards in these dying sections.
- Tryphocaria mitchelli* (Hope). 3 km N of Lansdowne, N.S.W., emerged 15.xi.1982 from a living branch of ? *Rapanea howittiana* F.Muell. ex Mez (Myrsinaceae), ex wet sclerophyll forest margin. Larva tunnelled through heartwood of stem.
- Uracanthus cryptophagus* Olliff. Starr's Creek, approx. 23 km N of Taree, N.S.W., cut from dying lateral branch of *Acradenia euodiiiformis* (F. Muell.) Hartley (Rutaceae), 27.ii.1984, ex subtropical rainforest. Larva had tunnelled along centre of branch.
- Uracanthus insignis* Lea, Harrington, N.S.W., emerged 15-20.iii.1983, from a dying branch of *Endiandra sieberi* Nees (Lauraceae), ex littoral rainforest. Larva tunnelled downwards through heartwood of lateral branchlet progressively killing branch.
- Wahn zonulitis* McKeown. Yarratt State Forest, N E of Wingham, N.S.W., emerged 12-14.xii.1982, from a dead, dry branch of *Acacia irrorata* Sieb. ex Spreng. (Mimosaceae), ex depauperate rainforest.
- Zoedia longipes* Poll. 5 km W of Comboyne, N.S.W., emerged 22-29.x.1983, from dead, dry canes of *Cissus antarctica* ex subtropical rainforest margin.

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References

- Duffy, E. A. J., 1963. *A monograph of the immature stages of Australasian timber beetles (Cerambycidae)*. British Museum (Natural History). London. 235 pp.
- Hawkeswood, T. J. and Peterson, M., 1982. A review of larval host records for Australian jewel beetles (Coleoptera: Buprestidae). *Victorian Nat.* 99(5): 240-251.